

California Regional Water Quality Control Board  
North Coast Region

Cleanup and Abatement Order No. R1-2000-02

For

Tosco Distribution Company  
and  
Unocal Products Corporation

1200 Railroad Avenue  
Eureka, California

Humboldt County

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds that:

1. UNOCAL Products Corporation (UNOCAL) owned a bulk petroleum distribution facility adjacent to Humboldt Bay at 1200 Railroad Avenue in Eureka (hereinafter "site"). UNOCAL and its predecessors operated the site from the early 1930s to 1997. UNOCAL received petroleum products from ships and stored diesel fuel, gasoline, heating oil, lubricants, solvents, and gasoline additives in large (eight tanks holding over 1,250,000 gallons) and small (ten tanks holding up to 25,000 gallons) aboveground tanks at the site. UNOCAL ceased operations at the site in 1996. Tosco Distribution Company (TOSCO) purchased the facility on April 12, 1997, at which time the large aboveground storage tanks were drained of fluids. TOSCO now leases the entire site to L&M Renner Inc., who operates a bulk petroleum plant. Total petroleum product stored at the site by L&M Renner Inc., is 90,000 gallons in small aboveground storage tanks, 55-gallon drums, and other containers of petroleum products. L&M Renner Inc., controls waste discharges pursuant to National Pollutant Discharge Elimination System General Permit No. CAS000001 for storm water discharges.
2. Several investigations since 1991 have documented discharges to the environment. Laboratory analyses from soil, groundwater, and surface water samples collected at the site have detected gasoline, diesel, benzene, toluene, ethylbenzene, xylene, methyl-tert-butyl-ether (MtBE), and chlorinated solvent compounds. MtBE is present at levels up to 2300 parts per billion (ppb), vinyl chloride is present at levels up to 2700 ppb, and benzene is present at levels up to 4900 ppb. The water quality objectives for MtBE, vinyl chloride, and benzene are 13, 0.5, and 1 ppb, respectively. In addition, separate petroleum phase product in the gasoline, diesel and larger molecular range hydrocarbons is found floating on groundwater at the site. UNOCAL and TOSCO are hereinafter referred to as the dischargers.
3. On September 7, 1994, the Regional Water Board Executive Officer issued Cleanup and

Abatement Order No. 94-120 to Unocal Eureka Terminal to address discharges of petroleum products and chlorinated hydrocarbons at the site. Order No. 94-120 required specific tasks to be undertaken in an investigation of soil and groundwater contamination at the site. This revised Order reflects the progress of the investigation, and requires additional tasks to be undertaken in the needed cleanup and abatement activities.

4. The site is located adjacent to Humboldt Bay, and overlies deposits of fill, bay muds, and sands. Shallow groundwaters underlie the site less than four feet below the ground surface (bgs). Less permeable materials underlie this aquifer, and incompletely separate the shallow zone from an aquifer found between eight and up to sixty feet bgs. Both aquifers have been affected by petroleum and related discharges. Groundwater levels in the upper aquifer under portions of the site fluctuate directly with Humboldt Bay tides, and these groundwaters may be in continuity with surface waters of Humboldt Bay.
5. The beneficial uses of the areal groundwater include:
  - a. domestic water supply
  - b. agricultural supply
  - c. industrial supply
6. The beneficial uses of Humboldt Bay include:
  - a. industrial service supply
  - b. navigation
  - c. water contact recreation
  - d. non-contact recreation
  - e. ocean commercial and sport fishing
  - f. saline water habitat
  - g. wildlife habitat
  - h. preservation of rare and endangered species
  - i. marine habitat
  - j. fish migration
  - k. fish spawning area
  - l. shellfish harvesting
7. The dischargers have caused or permitted, cause or permit, or threaten to cause or permit waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. Continuing discharges are in violation of the Porter-Cologne Water Quality Control Act and provisions of the *Water Quality Control Plan for the North Coast Region* (Basin Plan).
8. State Water Resources Control Board Resolution No. 68-16 and State Water Resources

Control Board Resolution No. 92-49 ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Section 13304 of the California Water Code") apply to this site.

9. Water quality objectives exist to ensure protection of the beneficial uses of water. Several beneficial use of water exist, and the most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions need to be considered that evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality objectives. The following table sets out the protective water quality objectives for surface and groundwaters at the site:

Constituent of Concern	Background Level ug/l	Water Quality Objective ug/l	Reference for Objective
Methyl-tert-Butyl-Ether	<5	13	California Office of Environmental Health Hazard Assessment Public Health Goal; applied to the narrative TOXICITY water quality objective for domestic supply
Toluene	<0.5	42	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 150 ug/l for domestic supply; USEPA taste and odor threshold of 42 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan
Benzene	<0.5	1	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 1 ug/l for domestic supply; USEPA health advisory for cancer risk 0.7 ug/l; applied to the narrative TOXICITY objective for domestic supply in the Basin Plan.
Ethylbenzene	<0.5	29	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 700 ug/l for domestic supply; USEPA taste and odor threshold of 29 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan
Xylene	<0.5	17	California DHS MCL, Title 22 of the California Code of Regulations, § 64444 is 1750 ug/l for domestic supply; USEPA taste and odor threshold of 17 ug/l, Federal Register 54(97):22064-22138; applied to the TASTE AND ODOR water quality objective for domestic supply in the Basin Plan
Total Petroleum Hydrocarbons as gasoline	<50	5	Published literature provides a taste and odor threshold of 5 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan for domestic supply, but detection limit is 50 ug/l and is controlling
Total Petroleum Hydrocarbons as diesel	<50	56	USEPA health advisory of September 4, 1992, Suggested No Adverse Response Level (SNARL) of 56 ug/l which is applied to narrative TOXICITY water quality objective for domestic supply in the Basin Plan
1,1-Dichloroethane	<0.5	5	for protection of domestic supply, Title 22 Section 64444.5
1,1-Dichloroethene	<0.5	6	for protection of domestic supply, Title 22 Section 64444.5
Trichloroethene	<0.5	5	for protection of domestic supply, Title 22 Section 64444.5
Tetrachloroethene	<0.5	5	for protection of domestic supply, Title 22 Section

Constituent of Concern	Background Level ug/l	Water Quality Objective ug/l	Reference for Objective
			64444.5
vinyl chloride	<0.5	0.5	for protection of domestic supply, Title 22 Section 64444.5

10. Reasonable costs incurred by Regional Water Board staff in overseeing cleanup or abatement activities are reimbursable under Section 13304 of the California Water Code and Section 25270.9 of Chapter 6.67 of the California Health and Safety Code.
11. The Regional Water Board will ensure adequate public participation at key steps in the remedial action process, and shall ensure that concurrence with a remedy for cleanup and abatement of discharges at the site shall comply with the California Environmental Quality Act.
11. The issuance of this cleanup and abatement order is an enforcement action being taken for the protection of the environment and, therefore, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et. seq.) in accordance with Sections 15308 and 15321, Chapter 3, Title 14, of the California Code of Regulations.

THEREFORE, IT IS HEREBY ORDERED that Order No. 94-120 be rescinded, and that pursuant to California Water Code Sections 13267(b) and 13304, Unocal Products Corporation and Tosco Distribution Company shall cleanup and abate the discharge and threatened discharge of petroleum hydrocarbons, chlorinated solvents, and other wastes forthwith and shall comply with the following provisions of this Order:

1. The dischargers shall conduct the investigation and cleanup tasks under the direction of a California registered geologist or registered civil engineer experienced in the area of groundwater pollution cleanup.
2. The dischargers shall submit a workplan to define background quality of areal groundwaters and the complete lateral and vertical extent of the groundwater contamination to the Executive Officer on or before January 30, 2000. The dischargers shall commence implementation of the workplan within 30 days following concurrence by the Executive Officer.
3. The dischargers shall submit the report of fieldwork completed under Provision 2 to the Executive Officer within 90 days from completion of fieldwork.
4. The dischargers shall submit a workplan for the expeditious removal of separate phase hydrocarbon product to the Executive Officer by January 31, 2000. The dischargers shall commence implementation of the workplan within 14 days following concurrence by the Executive Officer.
5. The dischargers shall submit a remedial action plan for the entire site to the Executive

Officer by October 2, 2000.

6. The dischargers shall comply with Monitoring and Reporting Program No. 99-13.
7. If for any reason, the dischargers are unable to perform any activity or submit any documentation in compliance with the schedule set forth herein or in compliance with any work schedule submitted in compliance with this Order and concurred in or revised by the Executive Officer, the dischargers may request, in writing, an extension of the time specified. The extension request must be submitted five days in advance of the due date and shall include justification for the delay including a description of the good faith effort performed to achieve compliance with the due date. The extension request shall also include a proposed time schedule with a new performance date for the due date in question and all subsequent dates dependent on the extension. A written extension may be granted for good cause, in which case this Order will be automatically revised.

Ordered by \_\_\_\_\_

Lee A. Michlin  
Executive Officer

January 20, 2000

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